

Prarie Falcon (Falco mexicanus)

Description/Size

Wing span: 37-43 inches Length: 15-18 inches Weight: 1-2 pounds



Like all falcons, the medium sized prairie falcon has a large head, notched beak, and "heavy shouldered" streamlined body. The back and upper wing are medium brown with pale bars and fringes on most feathers and the tail shows light barring underneath. The pale underbody is spotted on the belly and barred on the flanks. A large blackish patch on the white underwings distinguishes this from all other falcons. Sexes are similar in plumage; however the females have noticeably darker underwing patches. Narrow black malar stripes (mustache) extend from below the eyes downward along the chin. Eyes are dark brown. Eyelid, cere, legs and feet are bright yellow in adults, and more intense in males. Bluish beak with dark tip. Talons blackish slate. When perched, the wing tips do not reach the tail tip. Juveniles- bluish eye-ring, beak, cere, legs, and feet; plumage is more buffy, ventral plumage has a rosy tinge, underparts are streaked and feathers lack the pale bars seen in adults.

Similar Species

<u>Peregrine falcon</u> – similar in size and shape however it is blue-gray and has a thicker mustache, uniformly dark underwing and longer less rounded wing-tips. <u>Merlin</u> – a smaller falcon with a faint mustache, uniform underwing, and distinct tail bands. <u>Swainson's hawk</u> – can appear similar when perched, but wing-tips reach tail-tip.

Habitat/Range

Western US, southwestern Canada, Baja California and northern Mexico. Inhabits arid environments of western North America where cliffs or bluffs provide nest sites within open grasslands and shrub-steppe deserts.

An efficient and specialized predator of mediumsized desert mammals, lizards and birds. Ground squirrels are the mainstay of the prairie falcon diet and provide the fat-rich calories needed to raise young during the nesting season. When ground squirrels move underground to escape summer heat and dryness, most prairie falcons leave their nesting



areas in search of other prey – ground squirrels at higher elevations and birds, reptiles and insects. Horned larks and western meadowlarks are important prey items in winter. Prairie falcons actively search for prey during flight and catch prey on or close to the ground after a long low angled swoop from above or a ground hugging flight that takes prey by surprise. Takes birds and insects in the air. Are known to cache prey within their nesting territory which may allow prairie falcons to maximize food intake and dampen fluctuations in prey availability during the breeding season.

Common vocalization is the alarm/territorial call, described as a shrill *kik-kik-kik*. Call is generally harsher and deeper in the female. During courtship, both sexes emit a characteristic *eechup* call. Females emit a distinctive whine/wail when soliciting food or copulations from the male. Both give a *chitter* call during aggressive interactions

Voice

Behavior

Reproduction/Nesting

Clutch size: 3-6 eggs Eggs: elliptical, 2" x 1.6", creamy white to pink or russet; usually speckled, with brown or reddish brown.

Incubation: 34 days Fledge: 5-

6 weeks

Disperse: 3 weeks

Pairs do not stay together during the nonbreeding season; pair bonds are established or renewed after arrival on the breeding grounds. Widely separated nesting, postnesting, and wintering areas. More a "wanderer" than a true "migrant". Seasonal movements reflect responses to changing food availability throughout the year. Birds leave Idaho desert nesting areas soon after fledging and move to higher elevations or more northern latitudes where prey (ground squirrels) do not aestivate to escape summer heat/dryness. Flapping flight - short, rapid strokes with wings mostly below horizontal. Soars on flat wings with tail slightly fanned, and glides on flat wings or with wrists below body and wing-tips curved upward. Seems to prefer gliding over soaring; hovers occasionally.

Nests primarily on cliff ledges, crevices or cavities. Does not build a nest structure; instead scrapes loose debris to form a small depression to hold eggs within a nest site. Most cliff nest sites have some overhang which provides protection from storms and hot sun. Prairie falcons also use abandoned nests of eagles, hawks or ravens. On occasion, nests in trees, on power line structures, on buildings and inside caves. Nesting chronology in the NCA closely parallels that of ground squirrel populations. Prairie falcons arrive at nesting areas just as ground squirrels emerge from 6 months of aestivation in January or February, and they lay eggs when juvenile ground squirrels start to emerge from burrows. Prairie falcon young hatch when ground squirrel numbers are at peak, and they disperse by the time that ground squirrels aestivate in late Jun early July to escape heat, dryness, and food shortages. Sexually mature by their second year.



Life Span

Longest recorded – 17 years 3 months.

Conservation Status

Not on the US Fish and Wildlife's Endangered or Threatened Species List. However it is protected by the Migratory Bird Treaty Act. Idaho Fish & Game lists the prairie falcon as a protected non game species for which it is illegal to collect, harm or otherwise remove from its natural habitat. The BLM considers this an imperiled species in Idaho - it is experiencing declines in population or habitat and is in danger of regional or local extinctions in Idaho in the foreseeable future. The population is characterized as stable, but local declines have been recorded in some areas including portions of Texas, Alberta, and southwest

Idaho. Habitat loss due to urbanization is a continual concern and large-scale agricultural development affects the prairie falcon adversely, particularly in areas where populations forage on ground squirrels. Poisoning, use of farm machinery, and loss of cover prevent ground squirrels from maintaining populations in agricultural areas. Land use changes associated with agricultural development already may have contributed to population declines in parts of California, Idaho, and Alberta. Illegal shooting is a common cause of mortality, particularly for first-year birds. Collisions with fences, wires and vehicles are common; electrocution is relatively uncommon. Human disturbance is a frequent cause of nest failure. Computer simulations predicted that as little as 15% agricultural conversion on the Snake River Plain would reduce prairie falcon productivity to a point at which the population in the NCA could not replace itself. Extensive wildfires have altered shrub-steppe habitats near important prairie falcon nesting areas in the NCA since 1980. Piute ground squirrel populations fluctuate more in burned habitats dominated by exotic annuals than in unburned native habitats, and consequently fires may have increased year-to-year variation in prairie falcon reproductive success in

the NCA. A combination of wildfires, grazing, and military training activity has been associated with lower prairie falcon reproduction and abundance in portions of the NCA. Warmer winters have allowed Piute ground squirrels to breed almost a month earlier than they did in the 1970s and 80s. It is not clear if the prairie falcons have adapted their breeding to the change in the emergence of ground squirrel young.

Viewing in the NCA

Interesting Facts

Spanish name: Halcon mexicano

Sources

Seen in the NCA from February to late July. Nests on cliffs in the Snake River Canyon, and hunts the sagebrush-steppe country north of the canyon.

- the scientific name comes from the Latin word falx meaning "scythe", referring to the shape of the wing and shape of the talons and mexicanus refers to Mexico where the bird was first collected.
- Other names: Bullet Hawk
- Outward pointed, cone shaped projections in the center of the round nostrils slow down the air flow to allow fast flight without damaging the bird's lungs.

AXIA CD ROM - Know Your Birds of Prey

Bird Banding Lab - www.pwrc.usgs.gov/bbl/homepage/long2890.htm Idaho Fish&Game - http://fishandgame.idaho.gov/wildlife/nongame/birdspecies.cfm National Audubon Society The Sibley Guide to Birds

The Peregrine Fund - www.peregrinefund.org/Explore Raptors/falcons/prairief.html Birds of North America Online - http://bna.birds.cornell.edu/BNA/account/Prairie

US BLM - www.id.blm.gov/information/sss/Animal List FINAL.pdf US Fish and Wildlife Service - http://ecos.fws.gov/tess_public/TESSWebpageVipListed?

http://migratorybirds.fws.gov/intrnltr/mbta/mbtandx.html#h

code=V&listings=0#B Illustrations - courtesy of Alberta Sustainable Resource Development Map - The Peregrine Fund Photography - John Oakley

Raptor Information Sheet - Prarie Falcon